

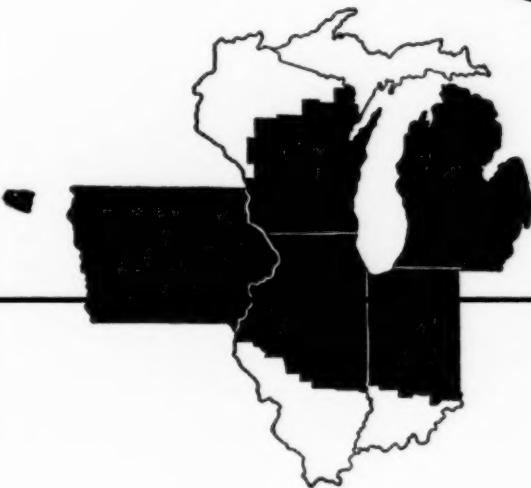
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FEDERAL RESERVE BANK OF CHICAGO

A review by the **Federal Reserve Bank of Chicago**

Business Conditions



1955 June

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THE Trend OF BUSINESS

After a lapse of about two years, a "new high" and "record level" have again become widely used phrases in the nation's financial press. Steel output, auto production, outlays for new construction and retail sales are a few of the measures of economic activity that in recent months have surpassed all past performances. In the credit area, new highs have been recorded in mortgage loans and outstanding consumer indebtedness. Gross national product for the present quarter will undoubtedly reach a new high, having already matched the previous peak of 370 billion dollars set in the second quarter of 1953.

The heavy concentration of hard goods industries in Seventh District states has brought about a more than proportional rise in the Midwest. The auto and steel industries which bulk so large in the Midwest have, together with residential and commercial construction, played leading roles in the business pickup.

This increase in economic activity is reflected in the bank credit picture. As business demand for credit increased seasonally last autumn, business loans began to rise. Such loans at big city banks increased by over 800 million dollars from the low in early August through the end of the year, in contrast to a bulge of 200 million in the last half of 1953.

Even more significant, however, is the continued rise in business borrowing that has been registered thus far in 1955. Although business loans normally decline in the first half of the year, commercial, industrial and agricultural loans at

leading banks, excluding holdings of CCC certificates, at the end of April were 500 million above the end of 1954 figure. This is in contrast to a 1.2 billion dollar slide during the first four months of last year. The 1954 decline, of course, was accentuated somewhat by the expiration of the corporate excess profits tax at the end of 1953.

Over one-third of this difference in business loan movements between 1954 and 1955 is due to the increased borrowing of sales finance companies. Booming auto sales helped to boost consumer instalment credit to a new high of 23 billion dollars at the end of the first quarter. This represents an increase of 500 million since the beginning of the year, compared with a decline of 800 million in the first three months of 1954. Almost all of this year's rise was accounted for by a 465 million increase in March. In making this credit available, sales finance companies increased their borrowings

The Midwest and the nation in 1955

	Seventh District	U.S.
[per cent change over year-ago levels]		
Employment, nonagricultural (Jan.-Mar.)	0.14	-0.03
Bank debits (Jan.-Apr.)	8	5
Department store sales (Jan.-Apr.)	7	6
Construction contract awards (Jan.-Mar.)	25	24*
Nonfarm mortgage recordings, \$20,000 or less (Jan.-Mar.)	43	41

*Excludes San Francisco Federal Reserve District.

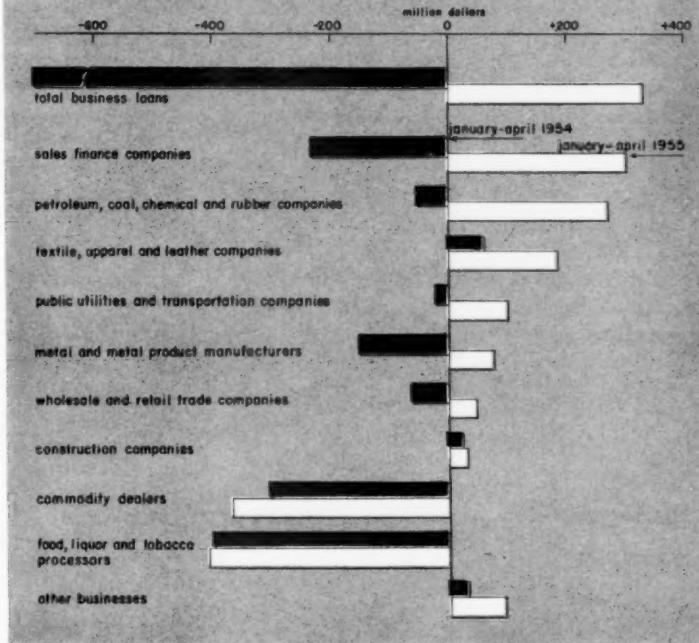
from leading banks by 300 million in the January-April period of this year, while in the like period of 1954 they had made net repayments totaling 230 million.

In addition to providing funds for sales finance company credit, consumer instalment loans at leading banks have also risen considerably. The loan group that comprises mainly loans to individuals increased by 750 million dollars since the end of September of last year, a jump of 10 per cent. Over the same time span a year earlier, such loans dropped by 200 million. At all Seventh District banks, instalment credit on automobiles alone has increased by more than 8 per cent since the beginning of the year.

The halting of the liquidation of business inventories toward the end of 1954 and the recent modest accumulation in stocks have been accompanied by a rise in outstanding bank loans in several industries. This movement has been particularly marked in credit extended to metals and metal product manufacturers, the textile, apparel and leather goods producers and wholesale and retail merchants. Whereas loans to these three groups combined declined by 50 million dollars in the first four months of 1954, this year they have increased by 450 million. This change accounts for another third of the total shift in business loans.

Petroleum, coal, chemical and rubber manufacturers have also increased their indebtedness substantially in 1955, although their inventories have been declining. The rise appears to

Most industries share in 1955 business loan rise at large city banks



be related instead chiefly to borrowings by purchasers of the Government's synthetic rubber plants.

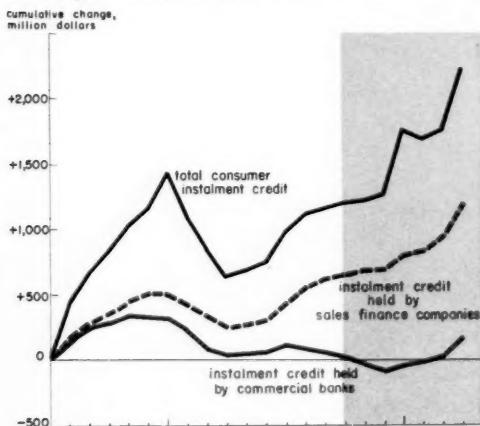
Comparison with other booms

The pattern of business loan movements since the recovery began in early autumn of last year differs somewhat from the lending experience of commercial banks in the two other recent "peacetime" periods of rising economic activity: the months from mid-1949 through the first half of 1950 and from the autumn of 1952 to mid-1953 period.

In the initial stage of each of these two periods, business loans increased at a much more rapid pace than they did in the 1954-55 recovery (see chart). From the time that business turned up in the latter part of the summer through the end of the year, loans grew by 7

per cent in 1949, by 13 per cent in 1952 and by only 4 per cent during the final four months of last year. During the same periods, industrial production rose by 4 per cent, 8 per cent and 6 per cent, respectively. The steel strike that ended in August 1952 was, of course, a big factor in the subsequent large-scale output rise and, to some extent, in the loan bulge that year. In addition, the rise in loans in the latter part of 1952 to food, liquor and tobacco processors and to commodity dealers, whose borrowing needs are related largely to commodity price and supply conditions, was somewhat above that of the comparable 1954 period. Yet, relative to the rate of expansion in industrial output, the increase in loans last fall and early winter appears quite small.

Commercial banks have shared in recent upsurge in instalment credit through direct loans and . . .



indirectly through loans to sales finance companies



In neither of the earlier periods, however, did the loan expansion carry over into the type of contra-seasonal rise that has taken place this year. In early 1950, business loans declined in each of the first five months. In 1953, only in March, when borrowing for tax purposes was combined with an early Easter, did business borrowing show a rise.

In each year since 1950, as the proportion of corporate taxes due in the first half of the year has gradually increased under the Mills plan, the effect of tax dates on the seasonal loan pattern has become more important. This year, with 50 per cent of the corporate tax bill due on March 15 and the other half on June 15, this effect has reached its peak.

Bolstered in part by borrowing to meet these tax payments, the present growth in loans has, after a small drop-off in January, continued unabated into May. Whether this upward movement in business loans will persist until the fall when seasonal factors will tend to further boost borrowing depends in the main on the course of business expansion and particularly inventory accumulation, as well as the supply of loanable funds.

Other loan categories

Mortgage and security loans also reflect economic developments. In the nine months from August through April, the changes in these loans at large city banks totaled:

	Aug. 1953-Apr. 1954	Aug. 1954-Apr. 1955
(million dollars)		
Real estate loans.....	227	865
Security loans	1	848

As the housing boom has continued, mortgage loans by banks have swelled. The 865 million dollar rise in real estate credit in the nine months ended in April represents an increase of 13 per cent in this loan category.

In recent months some insurance companies have begun "warehousing" mortgages with commercial banks. Under these arrangements, an insurance company sells a mortgage loan to

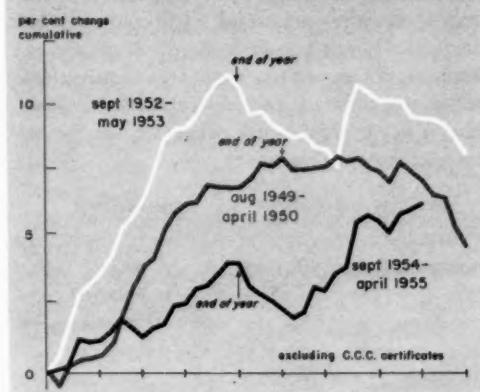
a bank for a specified period of time with the understanding that it will repurchase the mortgage at the end of that period. Thus, the insurance company is able to originate more loans by supplementing its funds with bank credit. Also, the insurance company is assuring itself of a future supply of mortgages should the demand for new credit slacken.

Security loans, although registering a dollar increase about the same as in real estate credit, have grown much more rapidly percentage-wise. Loans for purchasing and carrying securities are now 31 per cent greater than they were nine months earlier and 48 per cent above year-ago levels.

The loans on securities include credit for the purchasing and carrying of both Governments and other securities—corporate stocks and bonds and state and local obligations as well. Since the start of the year, loans on Treasury issues at banks in the nation's major money markets have declined by 200 million dollars, indicating that the increase in credit for other securities totaled over a billion dollars since the fall of last year.

The increase in security loans that has accompanied the 1955 stock market rise has occurred in the face of increased margin requirements. The Federal Reserve Board raised

Business loans at leading banks show contra-seasonal spring-rise in 1955



stock margin requirements on new stock purchases from 50 to 60 per cent in January and to 70 per cent toward the end of April.

Thus, the demands of most major users of bank credit have boosted total loans at big city banks to a new high of almost 43 billion dollars, 4 billion dollars above the year-ago level. Bank loans, consequently, are one of the many measures of economic activity that are surpassing previous record levels.

People on the move, an added stimulus

The expanding markets afforded by a rapidly growing population—15 million since 1950—have been among the forces helping to carry the nation's economy to new highs recently. Furthermore, population growth will be a continuing spur to business in the next decade and perhaps even later. Postwar population shifts

—from East to West, from farm to city and from core city to suburb—likewise have been economic stimulants. Insofar as the effects on much private and public investment are concerned, population shifts probably have been as important as population growth.

As people move about in search of better

climate, superior economic opportunities or more spacious suburban living, many of the facilities usually supplied by public agencies—roads, schools, parks, and water and sewerage services—have to be built anew. Similarly, the investment of private capital in homes, factories and offices is rooted to specific locations, and a population influx often creates the demand for new investment.

The mainstreams of movement

The shift from the farm to the city has been going on for a long time. At the end of World War I, 30 per cent of the U.S. population lived on farms. By 1950, this proportion was down to 17 per cent. Now it is below 14 per cent and probably much lower if we exclude families living on farms just outside of big cities and deriving most of their incomes from city jobs. Just since 1950, nearly four million people have "moved off the farm." The effect of this shift has been most marked in the South, the region with by far the largest out-migration and the largest off-the-farm movement.

Mechanization of agriculture, which permits vast increases in output per worker, has made this kind of migration possible. Since consumption of farm products is fairly stable, the market for farm output has little "stretch" to it. As productivity increases, fewer farm workers are required. This "pushes" people off the small and low-income farms. "Pulling" them into the cities are the possibilities for much higher incomes. The contrast in employment opportunities between overpopulated southern farms and northern cities is especially great.

The farm-to-city movement requires a big boost in capital invested in housing and community facilities. By and large, southern migrants to northern cities have moved into the less desirable close-in sections of metropolitan areas, which the older residents have vacated on their way to the suburbs. But even these low quality facilities represent much larger investments than the dilapidated, waterless and sewerless farm houses and schools abandoned in rural areas. The difference is especially large where cities are investing heavily in clearing

and rebuilding blighted areas. The abandoned facilities represent no economic loss to the nation, as they long since have been fully depreciated.

Even within the Midwest, the off-the-farm movement is evident. While population in industrial Michigan, for example, has grown in recent years at an annual rate of 2.5 per cent, Iowa's population has remained almost stationary. Within Iowa, the low-income rural counties, particularly those in the southern part of the state, nearly all lost population during the 1940's, while on the other hand all the counties with cities over 25,000—all with higher than average family incomes—gained in population. Even in Michigan, where population growth has generally been quite rapid, the low-income rural counties have shown the least gain, while the urban counties' populations have swelled.

City to suburb

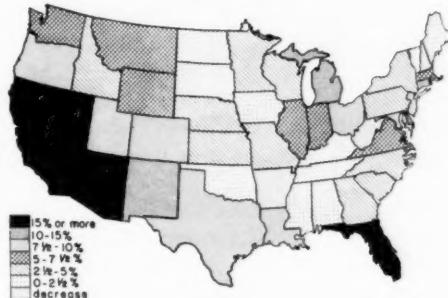
A second type of massive population shift, this one of more recent vintage, has been from the core sections of the large metropolitan areas to the suburbs. The full flowering of the automobile age has made it possible for millions of people to enjoy suburban living conditions and big city working conditions at the same time.

During the 1940's, 80 per cent of the country's population growth was in metropolitan areas and two-thirds of this was in the suburbs rather than the core cities. As a matter of fact, the population of the country's 18 largest cities—those over 500,000—grew only 8 per cent, while the surrounding suburban villages and cities grew by 24 per cent and unincorporated sections of the same metropolitan areas grew by 78 per cent. In the larger Midwestern metropolises, two-thirds of the 1950 population but only 35 to 40 per cent of the 1940 to 1950 population gain was accounted for by the central cities. The pattern is persisting today. Were it not for the migration from rural areas, particularly in the South, to the cores of the big cities, some of them might actually be losing on balance while their suburbs are mushrooming. The suburban boom is a vast stimulus to

ERRATUM: The maps (not captions) at the top and bottom of this page are transposed.

Population growth since 1950 since 1950

would have been about like this without migration . . .



but estimated net movement **into** or **out of** the various states . . .



resulted in an actual pattern of growth like this



What might have been

If everyone had "stayed at home"—no migration at all—the growth in each state would be equal to the excess of births over deaths—its "natural increase." If the rate of natural increase for each state during the decade before 1950 is assumed to have continued since then, population growth in 1950-54 would have been like that shown in the top map.

Even without migration, increases in a number of the southern and southwestern states, for example, would have exceeded 9 per cent. This is substantially higher than the U.S. average rate of 5½ per cent. Below average growth, on the other hand, would have prevailed in virtually all of the Northeast.

What actually happened

Population growth in the various states since 1950 has differed considerably from that stemming from natural increase alone. The difference, of course, is due to migration. Immigration from abroad has amounted to less than 10 per cent of the total growth in the nation's population.

States like California and Florida grew more than their natural rate would indicate, via a net inflow from other areas. On the other hand, where there was net out-migration, the *actual* increase fell short of the *natural* increase. Most of the Southeast and the Plains states fall into this category.

Net migration—the estimated difference between the natural increase and the actual increase—for the 1950-54 period varied greatly from state to state (see middle map). Many of the states that have high rates of natural increase also have high net out-migration. However, in only three—New Hampshire, Arkansas and West Virginia—did the out-migration so exceed the natural increase that their populations fell.

new investment, since most public and private facilities must be built from scratch, especially in the newer suburban sections.

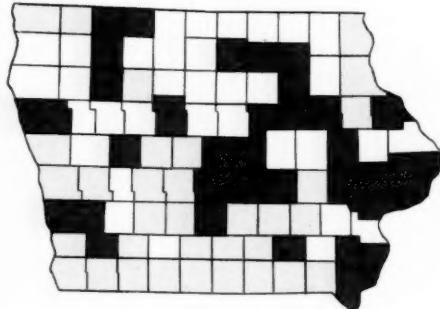
Following the sun

Stimulated by employment opportunities in defense industries during World War II, the

historic move to the West was very greatly speeded up. It continues today, partly because jobs still keep opening up in the West's fast-developing industries—electronics and aircraft conspicuously. But another big stimulus now is the quest for a more balmy climate, and both Florida and the Southwest, in addition to Cali-

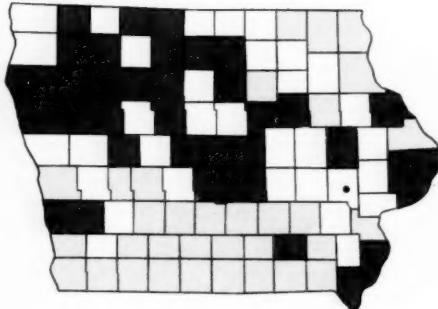
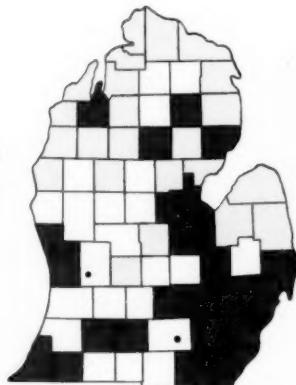
Population growth rates are highest in the top income counties in both rural Iowa and industrial Michigan

The low income counties generally lost population in Iowa and showed the smallest gains in Michigan. Counties containing a city of over 25,000 population typically had the highest incomes and most rapid growth.



population

population growth, 1940-50
top third
middle third
lower third



income

median family income, 1949
top third
middle third
lower third



fornia, have benefited from the influx. The migrants have generally settled in and, more often, near the bigger cities in these states, thus swelling the demand for new suburban facilities. In part, the migrants have come from rural areas and, in part, from cities in the North and East. By and large, the facilities left behind by the sun worshipers are farm dwellings outmoded to begin with because of the trend toward larger farms and city residential and community facilities which have become obsolescent in terms of modern living requirements.

Costs and benefits

Mobility of the population, like over-all growth, involves some cost. Building new homes and new community facilities absorbs resources that are not then available for other

uses. On the other hand, the kinds of migration we've been experiencing are apt to result in increased productivity, since the nation's work force is more efficiently distributed geographically. Moreover, the very process of meeting the needs of a growing and mobile population is an important source of investment and consumer demand helping to sustain the tempo of economic activity.

Mobility, furthermore, is evidence of a comparatively healthy state of economic affairs. So long as jobs are plentiful somewhere in the nation, workers displaced under the impact of technological innovations or shifts in consumer tastes will be able to find opportunities for gainful and productive work to the ultimate benefit not only of themselves but of the community at large.

More jobs; higher wages

Employment growth since last fall has shown less vigor than other measures of activity. Nevertheless, the number of people at work has continued to gain in recent months and remaining pockets of unemployment are being narrowed. The strengthening demand for labor, along with favorable business profits, points to larger than usual wage increases in major industries currently involved in union-management negotiations.

Unemployment down

Wage and salary employment had moved up 900,000 from the recession low last August to 48.8 million in April. This gain recovered about half of the 2 million decline from the 1953 peak. The great bulk of the decline and subsequent rise has been accounted for by factory production workers who, together with workers in mining and railroading, amount to only one-fourth of total employment.

Estimated unemployment, nationally, still hovers around 3 million, or 5 per cent of the labor force, despite some reported shrinkage since last year in the total number of people available for work. New hirings would have to increase substantially further before the tight employment conditions of most previous post-war years would be duplicated. In the 1951-53 period, unemployment fluctuated between 2 and 3 per cent of the labor force.

The "moderate surplus"

Every two months the Department of Labor classifies the major labor markets of the country into four main groups. These classifications take into account not only the current unemployment situation, but also future prospects as indicated by employer reports on hiring intentions. The following table gives the Midwest picture for March of this year. Year-ago classifications are given after each city. For

over a year none of the listed cities have been classified under the Group I heading.

Group II Balanced supply	Group III Moderate surplus	Group IV Substantial surplus
Flint (II)	Detroit (IV)	Battle Creek (IV)
Lansing (III)	Grand Rapids (III)	Muskegon (IV)
Saginaw (III)	Kalamazoo (III)	Evansville (III)
Kenosha (IV)	Aurora (III)	Fort Wayne (III)
Madison (II)	Chicago (II)	South Bend (IV)
Cedar Rapids (II)	Quad Cities (IV)	Terre Haute (IV)
Des Moines (III)	Joliet (III)	
	Peoria (III)	
	Rockford (III)	
	Indianapolis (III)	
	Milwaukee (III)	
	Racine (IV)	

Obviously, the great preponderance of job-seekers are looking for work in the "moderate surplus" markets. All of the very large cities are in this group.

Although the number of "substantial surplus" areas has declined, no major labor markets are classified in the "labor shortage" group. Under current conditions personnel managers in larger firms are able to fill job requisitions promptly and usually are in a position to exercise some choice in picking job applicants. These conditions place the low seniority and unskilled workers, along with those whose job performance appears least favorable, at some disadvantage in obtaining new positions. The evidence supporting this tendency is that joblessness has been quite stubborn in the under-24 and over-60 year age groups for the first time since the late Thirties.

Durables centers improve

The Midwest, dominant in durables, has benefited more than proportionately from the more favorable job market. This is because the greatest output gains have been achieved in steel, automobiles, farm machinery and electrical goods—the same lines which had absorbed the brunt of the 1953-54 downturn.

Among the largest cities, Detroit has enjoyed a substantial improvement as a result of the all-time record automobile assemblies and particularly the enhanced competitive position of Chrysler which operates its principal facil-

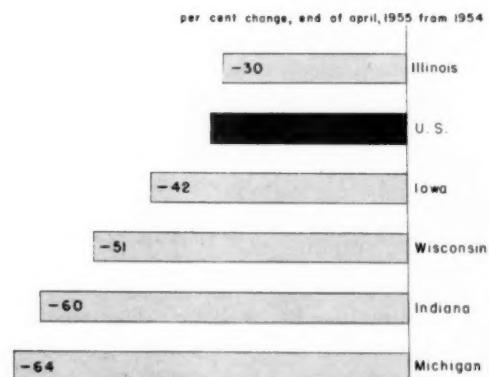
ties in that area. In March, Detroit employment was up 60,000 or 5 per cent from the same month in 1954. Unemployment had been cut in half. Employment in Chicago, Milwaukee and Indianapolis, meanwhile, has barely equaled year-ago levels despite recent improvements. All of these major centers still lag 1953 by about 5 per cent.

Throughout the 1953-55 period, Flint, Michigan, the home of Chevrolet and Buick, has been the strongest labor market in the Midwest and has shown continuing substantial year-to-year gains in employment. The most spectacular improvement among Midwest centers, however, has been in Kenosha, one of the most severely depressed cities in the District a year ago. So far in 1955 a substantial rise in output of Nash automobiles, the city's principal product, coupled with the shift of Hudson assemblies from Detroit to Kenosha, has caused that city to be classed as one of 18 in the nation in the "balanced supply" category. South Bend, where Studebakers are made, has also enjoyed some increase in automotive employment, but abandonment of the local Singer plant kept that city in the "substantial surplus" group.

Mobility a factor

The shifting character of local labor markets provides an opportunity for some workers

Insured unemployment off sharply



to improve their status by migrating to areas which offer better job opportunities. In fact, it appears that a considerable number of Midwest workers have taken advantage of such conditions. On the other hand, cutbacks in operations of uncertain duration have tended in some cities to result in unemployment and underemployment while local workers "sweat out" the adjustment. The economic advantages of opportunities elsewhere are not always attractive to well-settled workers who have temporary alternatives and longer-run prospects where they live. For example, the shutdown of the Cudahy packing plant in Sioux City and the slowdown at the ordnance works in Burlington, Iowa, have caused substantial and continuing labor surpluses in those smaller areas.

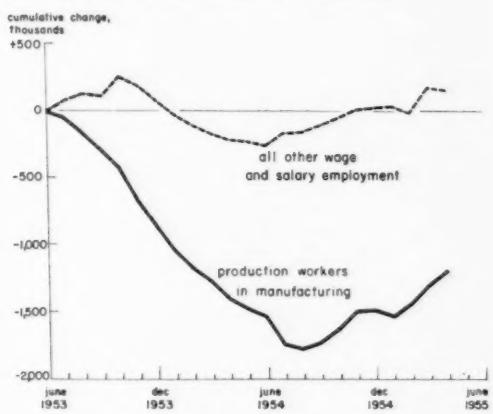
Output gains

The failure of employment to match the output gains registered during the recent upturn by industrial production and general business activity is traceable largely, if not wholly, to output gains in manufacturing. The following table contrasts recent experience with the corresponding period of high-level activity two years ago:

	January-March 1953	1955	Per cent change
Gross national product	362	370	+1.9
(billions of dollars)			
Wage and salary employment. 49.0	47.9	-2.1	
(millions)			
Industrial production (1947-49 = 100)	134	133	-0.7
Production workers (millions)	13.9	12.7	-8.4
Weekly hours in manufacturing 41.0	40.4	-1.4	

Physical output per worker in manufacturing appears to have increased by about 8 per cent over this two-year period. The resulting drop in production worker employment about equaled the decline in the total. However, mining and railroad employment also have been substantially less than in the earlier period. Contract construction has been about even with two years ago while the trade, finance,

Manufacturing employment still far below 1953, other jobs gain



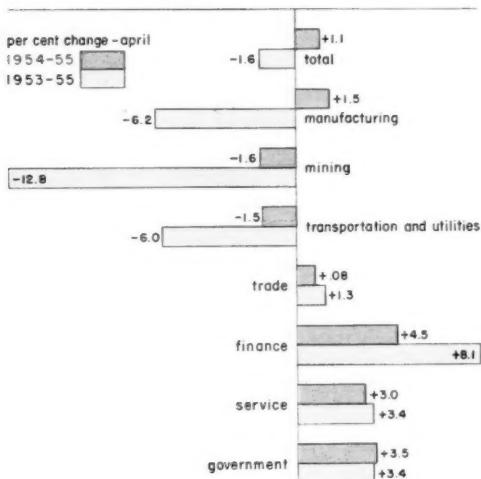
service and government groups are all higher.

Substantial improvement in industrial efficiency can be accounted for largely as a result of the heavy capital expenditures, much of which served to supplant manual labor. The reduction in output permitted temporary or permanent retirement of older facilities. Probably there was also some increase in output per worker as a result of the partial shift from military to civilian production items which are more adaptable to mass production methods. Other factors include the greater incentive on the part of the employed to retain jobs in a weaker labor market, the fuller utilization of working staffs maintained last year at a higher level than needed for the reduced rate of output, and an increase of over an hour in the average work week to 40.2 hours in April. Some manufacturers apparently have added to work weeks rather than hire additional workers because of the costs of taking on new help. Some auto workers have been on a 50 hour week, and production cutbacks could result in less overtime rather than layoffs.

Long-term growth

Although the employment situation has strengthened materially since last fall, the fears

Two-year employment picture shows wide variation



that 1955 would not see a return to "full employment" have not been stilled completely. Some contend that "full utilization of the labor force" would produce a gross national product

in the neighborhood of 390 billion dollars at the present time—about 20 billion in excess of the current rate. They accordingly propose credit and fiscal measures appropriate to this objective. Others, holding a different view of what constitutes "full employment," point out that the previous peak in 1953 was reached under the stimulus of rising defense outlays, and with it came a too rapid build-up of business inventories, labor shortages and inflationary pressures. The immediate prospect is for further additions to employment. Further output gains will require larger additions to the work force than took place in the past year. If, however, the production pace slackens its rate of increase, employment's gain would be moderate at best. There will be areas, moreover, experiencing a job easing in the latter part of this year. The automotive, farm machinery and steel industries are all operating at rates well in excess of the most optimistic forecasts for the year as a whole. Declines in these sectors, should they materialize, would need to be offset by expansion elsewhere in the economy if the gains in employment are to occur.

Transportation investment: trends differ for road and rail

Continued growth of investment in transportation facilities appears assured for the foreseeable future. Expenditure for improvement of the nation's three-million mile highway network is likely to set new highs for several years at least. Although opinions differ on how to raise the needed money, what kinds of roads to build and the role to be played by each level of government, there is general agreement that present activity needs to be stepped up.

In another important sector of the transpor-

tation field, however—the railroad industry—prospects look a lot different. The near-term view, based on industry reports during the first quarter of this year, is that the downturn in capital spending that began in 1951 after motive power dieselization passed its peak will not touch bottom for the rest of 1955 at least. Expenditure on new equipment and on improvements to roadway and structures appeared to be headed for a total 10 per cent or so under last year's, which, in turn, was down by about

35 per cent from the 1953 level of spending.

Shrinkage in rail investment

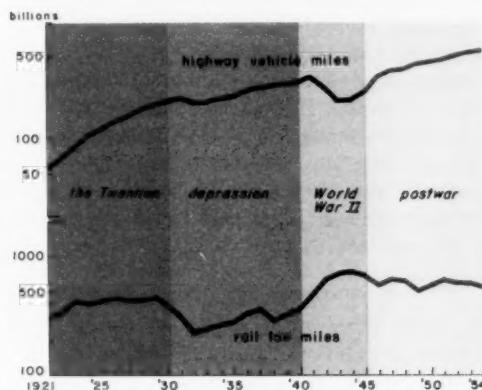
Railroad investment expenditure in past years, however, usually has been quite sensitive to the level of economic activity. So it is possible that the present upsurge in general business sooner or later will bring about some improvement in the rails' capital spending even though this was not foreseen when the recent industry survey of spending plans was made.

The stock of rail equipment tends to shrink in periods of business slump when traffic volume is in the doldrums. This process proceeds sluggishly, however, simply because of the huge supply on hand and the slow rate at which the long-lived units reach retirement age. The situation is much the same with investment in such fixed assets as terminal facilities and roadway installations. Sometime after the business pickup has begun, however, replacement usually picks up and capital spending is increased. Short-term swings in the tempo of rail industry operations, therefore, tend to amplify the outlays made for new plant and equipment. By the same token, a long-term downtrend in the industry's scale of operations or even a period of stability, if accompanied by more efficient use of facilities, usually spells net disinvestment and consequently a term of low-level spending to meet new capital needs.

Shrinkage in industry "capacity"—as measured in such physical terms as number of cars and miles of track—has been occurring in the railroad industry, with some interruptions, ever since World War I. This, however, has not led to any serious curtailment of the rails' ability to move traffic. Reductions in mileage and in car and locomotive ownership had been under way for some years when at the height of the War, in 1944, freight ton mileage reached 740 billion, two-thirds again as much as in the best year of the pre-depression Twenties and three times the volume handled in 1932.

Nothing in the offing now suggests that the long-term outlook is other than for continued shrinkage in the rails' relative share of the total transportation market. But their absolute

Postwar witnesses resumption of strong growth in highway volume, slow downtrend in rail traffic



volume, in the freight business at any rate, will rise. Against the backdrop of substantial prospective gains in the nation's population and economic standards, the total demand for freight transportation in the foreseeable future will inevitably increase. Competitors of the rails are likely to account for the lion's share of the gain, but hardly all of it. Support for this conclusion is found in a recent survey by the Twentieth Century Fund of economic prospects for 1960. This suggests that some appreciable expansion of the rail industry's freight carrying capacity and total investment spending will be called for. In some fields, of course, such as inter-city passenger travel, the railroads apparently will have to be satisfied with a decline in absolute as well as relative volume.

Expansion in highways

These prospects are a far cry from the picture in highway transportation. Rapid enlargement of the nation's highway system, interrupted only during World War II, has continued without letup almost since development of the motor vehicle began. Today it shows more vigor than ever before. Along with gains in the total population and a progressive rise in individual incomes and living standards,

a steady stream of technical improvements in highway vehicles has helped to stimulate expansion of highways and to boost their role in meeting the nation's transportation needs.

Today, in the wake of this tremendous development of highway transportation, many communities have been left wholly without rail service. Industrialization has in many instances spread into newer sections not directly served by rail. Factories once railbound now find it entirely feasible to use truck or other nonrail service to meet all or most of their transportation needs.

New investment in fixed property

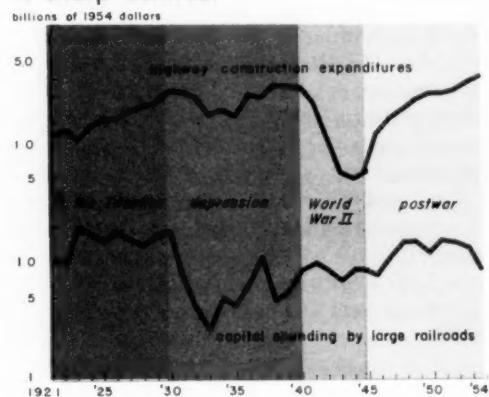
Highway construction expenditures in 1954 reached an all-time high of 3.5 billion dollars. In no previous period had yearly spending on roads and streets hit higher than 3 billion, even allowing for the marked rise over the years in unit construction costs. Outlays by the rail industry for additions and betterments to fixed way and structures last year were only a little over 300 million dollars, or about 8 per cent of the amount spent on roads. In the postwar period, more than six times as much has been spent on roads as on railway lines.

It would cost between 35 and 40 billion dollars to reproduce today's investment in the fixed assets of the rail industry. Yearly outlay of only 300 to 400 million on new road and structures thus implies a service life for such investment of virtually a century. This obviously exceeds the economic life of the items making up the railroads' fixed way and indicates that rail investment in fixed property is not being maintained.

Spending on new equipment

Expenditures for new railroad equipment since the War have averaged about 800 million dollars yearly, at 1954 prices. This is a substantially greater rate than was maintained even during the Twenties. The main reason for the pace achieved in the recent period, of course, was the transition from steam to diesel power, now largely accomplished. But for this development, spending in the equipment category

New investment in highways and the railroad industry; postwar trends in sharp contrast



probably would not have exceeded the level maintained between 1921 and 1930. In that earlier period, the carriers were maintaining a freight car fleet of 2.4 million units—half a million more than today's—and a stock of 65,000 locomotives, almost twice as many as they have now.

The reproduction cost of rail equipment, excluding units owned by private car lines, appears to be something on the order of 15 billion dollars. Yearly spending at the rate of 800 million constitutes replacement, therefore, if 20 years or thereabouts is the economic life of this class of investment. It may be doubted, however, that so long a period is a reasonable estimate of useful life, under today's conditions. Under the impetus of a flood of technological developments, competitive relationships have been changing so rapidly that a service life closer to that often taken for highway equipment would be more realistic. Assuming a 10 to 12 year average service life, therefore, the rail industry would need to spend 1½ to 2 billion yearly—or up to twice the postwar rate—to maintain an inventory of reasonably modern, functionally adequate equipment units. The actual level of expenditure in the post-1945 period thus clearly spells investment

contraction, where due allowance is made for accumulating obsolescence of the present stock and, particularly, the unusual concentration of equipment buying on a single type of equipment, diesel locomotives.

Spending on new highway vehicles—private automobiles as well as buses and trucks—since 1945 has averaged perhaps 10 to 12 billion yearly at today's prices. The comparison with expenditure for rail equipment during the same period in part reflects the greater service life of locomotives, freight cars and rail passenger equipment than of motor vehicles. A short service life is not without its advantages, of course, as it means quick recovery of investment and ready adaptation to changing demands and technology. Partly, too, the comparison shows up differences between an industry confronted with a stable market for its product and a segment of the economy that is struggling to keep abreast of a sharply rising growth trend.

The question of public policy

Vital to the effective performance and growth of the nation is an efficient and flexible transportation machine. Finding ways to assure that we will have an adequate transport system has become an acknowledged goal of public policy.

In the sphere of transportation, questions of public policy arise all the time. It is very much a matter of community concern whether the present rate of spending on new highways is "correct," because that rate is itself a matter of public responsibility. And, although the railroad industry is privately controlled, the prices or rates the carriers can charge and often the services they can supply have been largely a matter of public responsibility for many years. An increase in the need for rail facilities may be temporarily obscured by a failure, owing to rate regulation, of carrier income to reflect the fact. Likewise a slackening in the community's need for railroad capacity may be similarly obscured and for the same reason. Thus, it cannot always be said of investment in transportation, as it can of capital

outlay in most other sectors, that the present rate is the most desirable rate, given the aggregate amount of capital expenditure for all purposes.

Nor can the matter of investment programming in one transportation field be considered wholly apart from what is going in the others. More spent here may mean the need to spend less somewhere else. Ideally, there is some correct allocation of investment among the several transport media. This is the one which would reduce to a minimum the share of the nation's total resources used up in the process of moving things and people from place to place, the one that would produce the lowest possible overall cost of transportation. Pursuit of this ideal is a prime goal of public policy.

Defining the ideal is much easier than mapping out the route to it. The task, however, may not be an altogether hopeless one. Highways are chiefly financed by user charges which are much the same as prices found in the market. To a great extent, therefore, road investment is self-justifying in the same way as investment in private enterprise. Decisions on the rates of motor fuel taxes, it is true, are left to legislative determination. But, the implications for investment planning of a strong up-trend in receipts at a given tax rate, coupled with excessive congestion of present facilities, are not hard to read. Furthermore, the equipment spending component of highway transportation outlay, the purchases of automobiles, trucks and buses, is left purely to the interplay of market forces, so that no question of public policy planning arises.

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Policy change for rails?

The railroad sector, however, presents some particularly difficult problems. Currently under study is a Presidential Cabinet Committee proposal for restoration of more managerial discretion in the setting of railroad rates and planning of services. On its face such a measure would appear to promise wider application of the market principle in the common carrier field. Feared in some quarters, though, is the possibility of "cut-throat" competition which would work to the immediate detriment of other media of transportation. Whether, on balance, gains to the rail carriers and the community at large would offset losses to other carriers is a question that needs to be carefully consid-

ered. Further complicating matters is the awesome complexity of the existing transportation rate structure. Sizing up the likely effects of a move toward less regulation thus is no simple task. Perhaps the most that can be ventured is that piecemeal removal of glaring discriminations against or in favor of particular types of transport, whether exercised through statutory and administrative regulation or through the tax system, for that matter, would give better answers than we now have to such questions as: What is the proper role of each transportation medium in the whole scheme of things? and What is the appropriate scale and what is the proper direction of new investment in transportation facilities, with reference particularly to railroad and highway transport?

Investment and maintenance

Determining the volume of new investment in transportation facilities and its relationship to existing plant entails consideration of the accounting practices used in classifying such financial transactions. In the case of highways, reported spending for new construction reflects most of the costs of providing new traffic-handling capacity. But at least a portion of current maintenance spending may also add to productive capacity. Extensive repair, amounting to partial reconstruction, gives additional life to an existing pavement, although the cost is reported as current maintenance expenditure rather than construction outlay. Thus, the gross new investment in highway facilities depends upon the volume and direction of current maintenance expenditure as well as the level of reported construction outlay.

Moreover, from existing accounting records it is difficult to determine whether a given rate of new investment spending—even when construction disguised as maintenance is included—suffices to offset the current "using up" of investment in existing highways. The reason is that depreciation accounting is all but unknown in the sphere of government record-keeping.

Railroad accounting conventions also present difficulties to the determination of gross and net invest-

ment trends. Interstate Commerce Commission regulations require the railroads to "capitalize," or record as capital expenditure, their outlay for certain classes of assets. Typically these are expensive units acquired at such irregular intervals that their costs of acquisition would unduly burden and distort operating expenditure in any single year. Examples are bridges, right-of-way structures and units of motive power and equipment. Spending for new rails, however—a continuous process since replacement occurs with more or less regularity—is charged directly to operating expenses. Only the portion of the cost representing any added weight of the new rails as compared with those replaced may be capitalized.

It thus is apparent that some of the gross inflow of new investment into the rail carrier industry escapes detection when attention is confined to reported capital outlay, or "additions and betterments" in the language of railroad accounting.

Over and above these known, if unquantified, differences in accounting treatment of capital formation are the effects of business judgment on the most advantageous type of maintenance policy. There is a leaning, on the one hand, toward keeping plant as close as possible to 100 per cent condition and, on the other, a tendency to minimize maintenance expenditure at the cost of a more rapid using up of capital plant.